

Effect of The Amount of TIMERx-N, Dissolution in Type 2,
water, 50 rpm

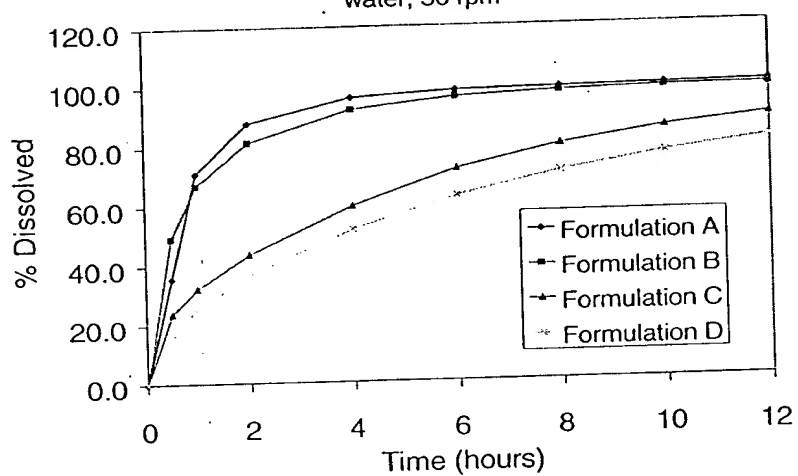


FIGURE 1

Effect of Different Grade of TIMERx (N vs O), Type 2,
Water, 50 rpm

% Dissolved

Time (hours)

Formulation A

Formulation B

Time (hours)	Formulation A (% Dissolved)	Formulation B (% Dissolved)
0	0.0	0.0
0.5	18.0	25.0
1.0	25.0	33.0
2.0	37.0	48.0
4.0	53.0	66.0
6.0	64.0	78.0
8.0	72.0	86.0
10.0	78.0	91.0
12.0	83.0	94.0

FIGURE 2

Figure 1 is a line graph showing the percentage of Tramadol dissolved over time (0 to 20 hours) for two formulations: (-) Tramadol IR Layer (filled triangles) and (+) Tramadol CR Layer (open triangles). The IR layer shows rapid dissolution, reaching nearly 100% within 10 hours. The CR layer shows a slower, sustained release, reaching approximately 98% at 18 hours.

Time (hours)	(-) Tramadol IR Layer (% Dissolved)	(+) Tramadol CR Layer (% Dissolved)
0	0	0
0.5	82	5
1	88	10
2	94	18
3	96	30
4	97	48
6	98	62
8	99	73
10	100	82
12	100	88
18	101	98

FIGURE 3

Figure 1 is a line graph showing the plasma concentration (ng/mL) of tramadol over time (hours) for two formulations: (+) Tramadol CR Layer (filled triangles) and (-) Tramadol IR Layer (open triangles). The CR layer formulation shows a much higher peak concentration (approx. 355 ng/mL) compared to the IR layer (approx. 95 ng/mL). Both formulations show a similar decline in concentration after their respective peaks.

Time (hours)	(+) Tramadol CR Layer (ng/mL)	(-) Tramadol IR Layer (ng/mL)
0	0	0
0.5	275	10
1	300	20
1.5	325	30
2	355	40
2.5	320	50
3	305	60
4	250	80
5	265	85
6	205	90
7	200	85
8	140	80
10	110	70
12	110	65
24	20	20
36	5	5
48	5	5

FIGURE 4